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## NOTICE OF ALLOWANCE AND FEE(S) DUE

24203

7590

04/20/2009

GRIFFIN & SZIPL, PC SUITE PH-1 2300 NINTH STREET, SOUTH ARLINGTON, VA 22204 EXAMINER

COHEN, STEFANIE J

ART UNIT PAPER NUMBER

1793

DATE MAILED: 04/20/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,454	01/30/2007	Keiichiro Oishi	MIKI0003	1329

TITLE OF INVENTION: COPPER ALLOY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/20/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further correspondence including the Patent, advance orders and notification indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new maintenance fee notifications.  CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  24203 7590 04/20/2009  GRIFFIN & SZIPL, PC SUITE PH-1 2300 NINTH STREET, SOUTH				ion of maintenance fees will be mailed to the current correspondence address as a correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.  Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.											
								ARLINGTON,	VA 22204						(Depositor's name)
															(Signature)
							(Date)								
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.								
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EXAM	MINER	ART UNIT	CLASS-SUBCLASS												
COHEN, S	TEFANIE J	1793	148-434000												
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un	ND RESIDENCE DATA	or agents OR, alternation (2) the name of a single registered attorney or 2 registered patent attempts the listed, no name will but THE PATENT (print or to	me of a single firm (having as a member a attorney or agent) and the names of up to ad patent attorneys or agents. If no name is name will be printed.  (print or type)  The area on the patent. If an assignee is identified below, the document has been filed for												
4a. The following fee(s)	riate assignee category or	categories (will not be pr	(B) RESIDENCE: (CIT rinted on the patent):	☐ Individual ☐ C	orporati	on or other private grou	np entity Government								
☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			<ul> <li>         ☐ A check is enclosed.     </li> <li>Payment by credit card. Form PTO-2038 is attached.     </li> <li>The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number</li></ul>												
	ns SMALL ENTITY state	ıs. See 37 CFR 1.27.	☐ b. Applicant is no lo												
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if requesion records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than COffice.	the applicant; a reg	istered a	ttorney or agent; or the	assignee or other party in								
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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## UNITED STATES PATENT AND TRADEMARK OFFICE

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10/597,454	01/30/2007	Keiichiro Oishi	MIKI0003	1329	
24203 75	90 04/20/2009		EXAMINER		
GRIFFIN & SZIPL, PC			COHEN, STEFANIE J		
SUITE PH-1			ART UNIT	PAPER NUMBER	
2300 NINTH STREET, SOUTH ARLINGTON, VA 22204			1793 DATE MAILED: 04/20/200	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 130 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 130 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/597,454	OISHI, KEIICHIRO	
Notice of Allowability	Examiner	Art Unit	
	STEFANIE COHEN	1793	
The MAILING DATE of this communication appea.  All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313  1. This communication is responsive to 1/14/2009.	(OR REMAINS) CLOSED in or other appropriate communication is supplication is supplication.	this application. If not included inication will be mailed in due course.	
<u> </u>			
2. The allowed claim(s) is/are <u>1-140</u> .			
3.  Acknowledgment is made of a claim for foreign priority una)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4.  A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give 5.  CORRECTED DRAWINGS (as "replacement sheets") must (a)  including changes required by the Notice of Draftspers 1)  hereto or 2)  to Paper No./Mail Date  (b)  including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the such sheet. Replacement sheet(s) should be labeled as such in the such sheet.	e been received. e been received in Application cuments have been received of this communication to file IENT of this application.  itted. Note the attached EXA es reason(s) why the oath of the submitted. son's Patent Drawing Review s Amendment / Comment or  84(c)) should be written on the	n No  If in this national stage application from a reply complying with the requirement of the complete complying with the requirement of the complete compl	nts OF
DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview S Paper No./ 7. ☑ Examiner's —	formal Patent Application  ummary (PTO-413),  Mail Date  Amendment/Comment  Statement of Reasons for Allowance  -	

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**EXAMINER'S AMENDMENT** 

Page 2

An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37

CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no

later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Joerg- Uwe Szipl on 3/8/2009.

The application has been amended as follows:

26. A method of producing a copper alloy wherein,

in a casting process, Zr is added in a form of a copper alloy material containing Zr, and

Zr is prevented from being added in a form of an oxide, or a sulfide, or an oxide and a

sulfide, when casting, thus producing the casted alloy as claimed in claim 1.

134. A method of producing a copper alloy, wherein,

in a casting process, Zr is added in a form of a copper alloy material containing Zr, and

Zr is prevented from being added in a form of an oxide, or a sulfide, or an oxide and a

sulfide, when casting, thus producing the casted alloy as claimed in claim 3.

136. A method of producing a copper alloy, wherein,

in a casting process, Zr is added in a form of a copper alloy material containing Zr, and Zr is prevented from being added in a form of an oxide, or a sulfide, or an oxide and a sulfide, when casting, thus producing the casted alloy as claimed in claim 5.

138. A method of producing a copper alloy, wherein,

in a casting process, Zr is added in a form of a copper alloy material containing Zr, and Zr is prevented from being added in a form of an oxide, or a sulfide, or an oxide and a sulfide, when casting, thus producing the casted alloy as claimed in claim 7.

The following is an examiner's statement of reasons for allowance: Costas, Us Patent 3900349, teaches a silicon brass resistant to parting corrosion. Costas, Figs. 2-4, teaches a Cu, Si, Zn alloy that fits within the instantly claimed ranges. These figures teach the alloy is annealed and quenched to achieve specific phases. Annealing and quenching steps are not present in the instant claims. Further, Costas teaches no equilibrium phase boundaries are shown in Fig. 1 since cast alloys are generally produced under non equilibrium conditions. Therefore, Costas does not teach a cast copper alloy having phases in relation as claimed and average grain diameter as claimed achieved by casting the copper alloy.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEFANIE COHEN whose telephone number is (571)270-5836. The examiner can normally be reached on Monday through Thursday 9:3am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 5712721234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stefanie Cohen 3/8/2009

SC April 13, 2009

/Melvin Curtis Mayes/ Supervisory Patent Examiner, Art Unit 1793